

Notice of Allowability

Application No.

10/077,000

Examiner

Quan-Zhen Wang

Applicant(s)

LAGASSE ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/15/02.
2. ☒ The allowed claim(s) is/are 1-38.
3. ☒ The drawings filed on 15 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 7/29/02, 8/1/02
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


M. R. SEDIGHIAN
PRIMARY EXAMINER

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-38 are allowed.
2. The following is an examiner's statement of reasons for allowance:

Regarding claims 1 and 24, the prior arts of Smets et al. (U.S. Patent US 6,411,415 B1), Desurvire (U.S. Patent US 6,556,322 B1), and Mollenauer (U.S. Patent US 5,710,649) do not fairly teach or suggest a plurality phase shifters, each of the plurality of phase shifters including a clock input that receives the electrical clock signal and including a control input, a respective one of the plurality of phase shifters generating a phase-shifted electrical clock signal in response to a signal applied to the control input of the respective one of the plurality of phase shifters, in addition to other limitations recited in claims 1 and 24.

As to claims 14 and 31, the prior arts of Smets et al. (U.S. Patent US 6,411,415 B1), Desurvire (U.S. Patent US 6,556,322 B1), and Mollenauer (U.S. Patent US 5,710,649) do not teach generating a plurality of phase-shifted electrical clock signals in response to at least one control signals, a respective one of the plurality of phase-shifted electrical clock signals being synchronized to a respective one of the plurality of data channels, in addition to other limitations recited in claims 14 and 31.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Smets et al. (U.S. Patent US 6,411,415 B1) is recited to show an optical transmission system with a receiver using full optical clock recovery (fig. 1) which comprises an optical clock recovery system (fig. 1, element 48; and column 4, lines 44-51); a beam splitter (fig. 1, element 28) to generate plurality identical optical signals (column 4, lines 52-58).

Desurvire (U.S. Patent US 6,556,322 B1) is recited to show a system to detect one or more free channels in an optical time-division multiplex (fig. 1) which comprises an optical clock recovery system (fig. 1, element 4; and column 4, lines 13-14); a splitter (fig. 1, element 105) to generate plurality identical optical signals (column 4, lines 15-18), a phase shifter (fig. 1, element 123) to phase-shift the clock signal a predetermined amount (column 4, lines 23-27).

Mollenauer (U.S. Patent US 5,710,649) is recited to show a time-division demultiplexer (fig. 5) which comprises an optical splitter (fig. 5, element 45) to split input optical signals into plurality identical, separate signals (column 9, line 67 and column 10, lines 1-5), a clock recovery system (fig. 5, Branch CD; column 10, lines 6-29).

In addition, Smith et al. (U.S. Patent US 4,809,256) is recited to show a method and system (fig. 1) for demultiplexing an optical signal having a bit rate in the order of Gbit/second (column 2, lines 39-68, and column 3, lines 1-35), which comprises an optical splitter (fig. 1, element 3) generating a plurality of substantially identical optical

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data signals (column 2, lines 46-49), an electrical clock recovery circuit (fig. 1, OPTICAL FIBER REGENERATOR 1) generating an electrical clock signals (column 2, lines 43-46).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan-Zhen Wang whose telephone number is (571) 272-3114. The examiner can normally be reached on 9:00 AM - 5:00 PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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M. R. SEDIGHIAN
PRIMARY EXAMINER